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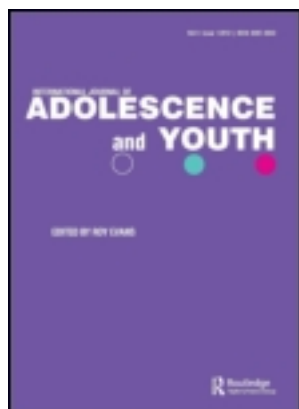
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Shifts in the Educational and Vocational Careers of Dutch Young Adults During the Eighties: On the Decreasing Pay-off of Education¹

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ABSTRACT

This article examines the development of the educational and vocational careers of 1257 subjects born between 1961 and 1969 as a function of economic circumstances in the Netherlands during the eighties. Subjects were expected to attend school longer in times of recession, to have a higher level of education, while getting a suitable, high-quality job (in terms of number of hours, appointment type and occupational level) would be difficult.

Consistent with the hypotheses, members of younger birth cohorts indeed needed less time to find a job after leaving full-time education. However, the other hypotheses were not supported: enrollment in higher education increased per birth cohort, the level of education of the youngest cohort was not lower than that of older cohorts, and members of cohort 1961 had a better job than younger cohorts in terms of appointment type, number of hours worked, and job level.

INTRODUCTION

This study reports on the impact of the recession at the start of the eighties on the development of the educational and vocational careers of three birth cohorts of Dutch young adults, born in 1961, 1965 and 1969, respectively. Many of these subjects entered the

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labour market between 1978 and 1991. However, due to the severe economic crisis at the start of the eighties (the recession reached its peak somewhere between 1981 and 1984 in the European countries, OECD, 1992), it can be assumed that subjects who entered the labour market at the beginning of the eighties (in majority members of birth cohort 1961), will have experienced the negative effects of the recession much more strongly than the later birth cohorts. This study examines whether—and if so, in which respects—the vocational and educational careers of the members of these three birth cohorts differ.

Research on the impact of historical events on the lives of people can be framed in the generational model developed by the Dutch sociologist H.A. Becker (e.g., 1990; 1993). He distinguishes among four different “generations” that emerged after 1910, which differ in their career opportunities. The concept of “generation” refers to a group of people “. . . characterised by a specific historical setting and by common characteristics on an individual level (biographical characteristics, value orientations and behavioural patterns) and a systems level (size and composition, generational culture, and specific organisations and social networks” (H.A. Becker, 1990). This report focuses on the last of these generations, consisting of those who were born between 1955 and 1970, a generation that is sometimes also denoted as the “lost” generation. The main body of this generation underwent its formative period in the mid-seventies and later. At the same time, they had to get used to the idea that global recession had broken out, and that they would have to face the consequences as soon as they left school or university: due to the economic crises of the seventies and the eighties, they have had considerably less opportunity to pursue a career than the earlier generations. They had to cope with an unfavourable labour market due to a low demand for labour and a large supply of school-leavers (as a result of the 1950–1970 babyboom). This pattern of generations generalises to other (Western) countries as well.

In most European countries, youth unemployment reached its peak between 1982 and 1984 (OECD, 1992). In the Netherlands there were 281,000 persons without a job in 1979; this figure increased to more than 820,000 persons in 1984. Successively there was a decrease to 686,000 unemployed persons in 1987. The recession hit starters on the labour market much harder than experienced workers. If economic prospects are bad, employers will be reluctant to hire new workers; this means that school-leavers have little chance of finding a job. It is far easier not to hire

new employees, than to fire already hired personnel. The reverse holds true for the period after 1984, when employment rates were on the rise again: young employees are much cheaper to hire than experienced workers (i.e., persons fired during the recession), and as a result youth unemployment decreased faster than total unemployment after 1984.

From the review above, it seems plausible that the recession will have affected the careers of the members of various birth cohorts *within* the lost generation differently; those who entered the labour market in the early eighties would be expected to have suffered the consequences of the recession more than those who left school only by the end of this period. Hence, the lost generation may not be homogeneous with regard to the opportunities experienced by the members of its constituent cohorts.²

In the remainder we explore the changes that have occurred between 1980 and 1990 regarding the educational and vocational careers of young Dutch adults aged 18 to 30. First we deal with the educational behaviour of subjects under varying economic circumstances. Successively we discuss the impact of the recession on their employment careers.

Recession, cohorts, and level of education

Recession and level of education

First, we examine the hypothesis that subjects will try to increase their "human capital" (G.S. Becker, 1975) in times of economic crisis, by increasing their level of education. From a rational point of view, it seems plausible that in times of recession subjects will try to improve their chances on the labour market by an additional investment in education: the more they can offer potential employers, the larger the chances that they will find a job.

The average level of education of the Dutch labour force has increased significantly between 1930 and 1980 (De Graaf and Luijkx, 1992). The latter authors maintain that this is due to the increasing importance of education as an institution in the allocation of jobs. If this is the case, it would appear that level of education will become even more important as an allocation mechanism in times of crisis (where a high supply of labour coincides with a low demand for labour; under such circumstances it will be impossible to obtain a high-level job without

having the appropriate educational qualifications). This, in turn, leads to the expectation that young people in times of crisis will tend to reach the highest level of education possible, precisely because of the increasing importance of education as an allocation mechanism; in times of economic prosperity, the need to have a high education in order to obtain a good job will be lower, as the demand for labour will be high.³ Hence, from a rational point of view there is little reason for an extra investment in education: finding a good job with a comfortable income is relatively easy in times of economic prosperity. This line of reasoning is supported by studies that show a relation between wage level and unemployment; the wage level is low when unemployment is high, and vice versa (Phillips, 1958; Phelps, 1968; Graafland, 1992).

Recession and duration of attending full-time education

Other things being equal, increasing one's level of education will usually require that one attends school for a longer period. Hence, it can be expected that in times of recession subjects will stay longer at school than in times of economic prosperity. Additionally, being unemployed is *in itself* an unattractive choice; many unemployed feel their situation contains little variation, they experience little appreciation from their environment, and they feel that the things they do are of little value (Schaufeli, 1988; Taris, Heesink and Feij, 1995). Hence, when faced with the choice between being unemployed and attending school for a little bit longer, many subjects will prefer attending school, even if this extra investment in education does not immediately pay off. Thus, in times of recession subjects are expected to leave full-time education relatively late.

Hypotheses

In general, then, we expect (a) that recession will lead to an increase of the mean level of education, while under more favourable economic circumstances the average level of education will decrease; and (b) that in times of recession, subjects will stay longer at school than in times of prosperity. For the current data set, this implies that members of cohort 1961—who would normally enter the labour market at the beginning of the eighties—will tend to leave full-time education later than the members of younger birth cohorts. This would especially apply to the lower and intermediate levels of education, as these subjects would be likely to enter the labour market at that time. For later

cohorts, the consequences of the recession should be less strong or even absent; it is unlikely that members of birth cohort 1969 will severely be affected by the recession, as they were only 12 to 14 years old at the time. If such a trend would indeed be present, this will probably also show in the average level of education of the three birth cohorts. It is predicted that the level of education of birth cohort 1961 will be the highest, while the mean level of education of the younger cohorts is expected to be significantly lower.

Recession, cohorts and employment

Recession and finding a job

It is a matter of course that school-leavers will usually have a much harder time finding a job in times of crisis, than when the economy prospers (though this might be contingent upon one's level and type of education). We therefore predict that the interval between leaving full-time education and the first job will be longer for members of cohort 1961, than for the members of the other cohorts.

Recession and the quality of one's job

One would expect that the quality of jobs obtained by starters on the labour market deteriorates in times of recession and high youth unemployment. Firstly, employers will require a higher amount of formal education from job applicants than formerly judged to be necessary to perform well on the job. After all, they want the best candidate for the position, and quality is often identified with a high level of education. As seen above, this trend should coincide with a rising level of education on the side of the applicants. All in all, this will lead to an inflation of educational attainment (Huijgen, 1989): we expect that the oldest cohort will need more education than the younger cohorts to obtain a job of a similar level.

Secondly, we expect that in times of recession the jobs offered to school-leavers will relatively often be on a temporary basis. As said above, employers will feel the need to be flexible with regard to their personnel; they must be prepared to fire people, rather than attract more personnel. Hence, they will hire the amount of labour they need, preferably on a temporary basis. There will also be people applying for these positions: jobs are scarce, while the

supply of labour is large. These considerations lead to the hypothesis that the first job after leaving school of the members of birth cohort 1961 will relatively often be a part-time and/or temporary appointment, while the members of the younger cohorts will be offered a full-time and/or permanent appointment.

Hypotheses

Essentially, the expectations formulated in this section deal with the rewards (or payoff) of education regarding the vocational careers of starters on the labour market under varying economic conditions. Our hypotheses are (a) that it will be harder to find a job in times of recession, while (b) the quality of these jobs—in terms of number of hours, contract type, and level of the job—will be lower than under more favourable circumstances. These negative effects of recession might vary per educational level. Subjects are expected to invest in their education in times of recession, because they assume that their chances on the labour market will increase. However, as many subjects will display this type of behaviour, the increased supply of higher-educated will nullify these effects of increasing one's human capital. Therefore, we formulate no explicit hypotheses regarding the effect of education on the relation between recession on the one hand, and the quality of the job and the duration of unemployment on the other.

Other factors affecting the careers of young adults: Limitations of the study

The current study does not employ a well-planned experimental design to test the hypotheses, because a study like this must necessarily be imbedded in particular historical circumstances that cannot be manipulated. As a consequence, it is difficult to unequivocally reject or confirm the hypotheses, as there will undoubtedly be alternative explanations that can account for whatever result. For example, in 1982/1983 the Dutch school system underwent an important transformation with regard to the way university scholarships were granted. Before '82, there was no limit to the period that students could receive such scholarships; afterwards, one could only receive a scholarship for seven years at most. This measure was taken with an eye to letting people graduate faster than was the case until then. Hence,

if we would find that members of the later birth cohorts take less time to complete their education than members of older birth cohorts, this could be due to this particular governmental measure, to economic circumstances, or both (Van Ewijk, 1994). Alternatively, the cohorts could differ regarding their values, and these could also be the cause of between-cohort differences.⁴ Due to the nature of the study, it is difficult to rule out such alternative explanations.

The fact that various birth cohorts face different historical circumstances, apart from economic circumstances only, presents an important problem in the interpretation of effects. We nevertheless believe that a mere description of the course of the educational and vocational careers (which would be the safest option) would diminish the value of this study, as we feel that the theoretical framework outlined above is plausible and may well account for possible differences in young people's experiences during the eighties. In spite of this, results should be interpreted carefully, and the possibility that alternative explanations exist should be kept in the back of one's mind.

METHOD

Sample

The data were gathered in a two-wave panel study. The first wave was conducted during fall/winter 1987/88 among a sample of 1775 young Dutch adults, evenly divided over three birth cohorts (1961, 1965 and 1969), as well as gender. They were interviewed at their homes by trained interviewers who used a structured interview schedule. The interview addressed attitudes, opinions, and behaviour with respect to several life domains, such as employment, education, and family formation. Additionally, the subjects had to complete a written questionnaire. In reviewing the representativity of this sample, Dijkstra and Smit (1989) conclude that there are no reasons to assume that this sample is not representative for the Dutch population in these age groups.

The second wave of the study (an almost exact replication of the first wave) was conducted exactly four years after the first wave (fall/winter 1991/92). About 70% of the subjects ($N = 1257$) also participated in this wave. Analysis of non-response showed that higher-educated were slightly more likely to participate in the second wave than others, which is a common finding in

survey research (Goyder, 1987). Regarding other variables (including socio-economic, marital, and employment status, gender, and age), no important differences were found (Taris, Van der Vaart and Dijkstra, 1993). During both waves information was collected about the number, nature, and timing of changes on the life domains mentioned above, by means of retrospective questions. This enabled us to re-create a fairly precise record of the course of events on these domains.

Variables

Variables in the study were the following.

Level of education

We distinguish among five levels of education (cf. Taris and Bok, 1996). The first level is *lower secondary school*. Usually this type of education is attended after completing primary education. It takes four years to complete. The second level is *intermediate secondary school*, with some vocational training. This level takes four years to complete, and it is attended by subjects who have completed their lower secondary education. Thus, one would need eight years to obtain this qualification. The third level is *higher second school and pre-university training*. This type of education takes five to six years to complete, and it is attended after completion of primary education. The fourth level, *professional college degree*, takes four years to complete and is a natural choice after completing either intermediate or higher secondary school. The fifth level is the *university degree*. Subjects who have completed either higher secondary school and pre-university training, or have obtained a professional college degree (level 3 or 4), can enter here.

The discussion above clearly shows the possibilities of the Dutch educational system for subjects who do not yet want to enter the labour market: subjects starting off at the lowest level of education can in principle reach the highest level, though this will take a considerable amount of time. Naturally, a subject does not necessarily have to attend a higher level after obtaining a particular qualification; one may also choose to enter the labour market. As stated above, the choice between entering the labour market and acquiring additional educational capital is considered to be at least partly determined by economic circumstances.

Duration of attending full-time education/duration of unemployment

The event "left full-time education" was defined as the difference between the moment one first entered secondary education (i.e., age 12), and the moment one left full-time school. The duration of unemployment was operationalised as the number of months that elapsed between one left full time education, and the moment at which one found a paid job of at least 20 hours per week.

Job level was operationalised by means of the job level classification developed by Bakker, Jonker and Oud (1988). This scale is based on the amount of formal education necessary to perform well in a particular job. Additionally, if a job requires specific skills (such as leadership capacities, or a large degree of initiative), the score is increased by one point. This scale ranges from 1 (low) to 6 (high). It is especially appropriate in the current study, as it is principally based on the amount of formal education needed for a particular job. Therefore, changes in mean job level across cohorts while controlling education indicate shifts in the level of education required by employers to obtain a particular job. For example, if a job formerly fulfilled by someone having only primary education is fulfilled by someone having secondary education, the latter person is working *below* one's level of education.

Finally, the subjects were asked to indicate whether their first job after leaving full-time education was a temporary or a permanent job (*Appointment Type*), and whether it was a *full-time* or a *part-time* job.

Procedure

The data consisted of durations (the duration of attending school/being unemployed), means (mean job level, number of hours worked, and level of education), and proportions (the proportion of subjects having a permanent or a temporary appointment). The duration data were analysed by means of survival analysis. This technique examines whether the distribution of survival times (i.e., the time between one entered a particular state—such as being unemployed—and the moment one left this state—i.e., found a job) is different for members of different groups. For example, we can examine whether members of birth cohort 1961 are usually longer unemployed than members of other cohorts; whether males attend school longer than females; and so on. The advantage of this technique is that

information with regard to the duration of being in a particular state is used in the analysis, even if one has not (yet) left this state at the moment the observation stopped (i.e., left-censored observations can be used in the analysis).

RESULTS

Changes in the educational career of young adults during the eighties

Duration of attending full-time education

Figure 1 presents survival curves of attending full-time education, for the three birth cohorts separately. These charts show the proportions of subjects who were still attending full time education per birth cohort. For example, Figure 1 shows that, from the members of cohort 1965, about 50% was still attending school at age 18; at 24, this figure dropped to about 15%, et cetera. No data are available for this birth cohort after 26, due to the sampling design (data collection stopped after 1991). The other curves are interpreted in a similar way. We collapsed across gender, as there was not much difference between the survival curves of men and women.

Figure 1 reveals that—contrary to our expectations—the older the cohort, the less time was spent before leaving full-time education. For instance, a smaller proportion of birth cohort 1969 had left education at 19, than of birth cohort 1961. These differences between the birth cohorts are also reflected in the median survival times of the cohorts (MST, here the age at which 50% of the sample had experienced the event of interest, in this case, left school). For cohort 1961 MST was 17.52, for cohort 1965 MST was 17.93, and for cohort 1969 MST was 18.42. The non-parametric Lee-Desu statistic (Lee and Desu, 1972) showed that there were significant differences between the survival curves (the value of the test statistic is 30.25 with 2 *df*; $p < .05$). Pairwise comparisons revealed that the survival curve for birth cohort 1961 differed from the curves for the other two cohorts, $p < .05$, in both cases. Thus, it appears that cohort 1961 differs from the younger two cohorts.

Level of education

The fact that increasingly more time was spent attending full time

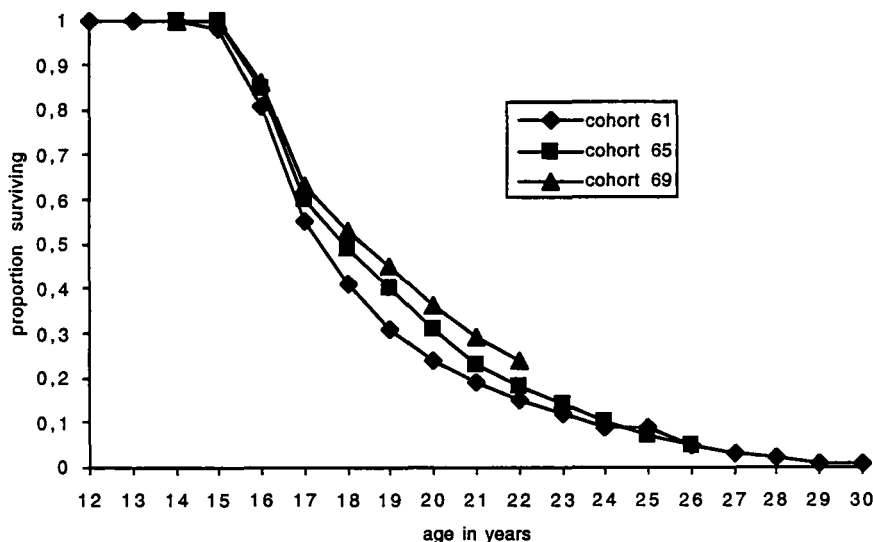


Figure 1. Survival times for leaving full-time education for birth cohorts 1961, 1965 and 1969.

education by each successive birth cohort leads to the question whether the mean level of education also increases per birth cohort; is the oldest cohort less well educated than the youngest? This presents a difficulty, as many members of the youngest cohorts had not yet finished attending full time education at the moment data collection stopped. This implies that comparing the level of their education is difficult and probably conservative, as the youngest cohorts will in the near future probably attain a higher educational qualification than they had at the moment observation came to a halt. Hence, below two tables are presented. Table 1a presents the mean level of education per cohort for men and women separately, concentrating on the highest level of education completed by the subject. Table 1b presents the same figures, but focuses on the highest level of education one is still working on, i.e., one may not yet have obtained a certificate, and could still be attending school.

Focusing on the level of *completed* education first, Table 1a shows that the mean level of education did not differ much among cohorts. Additionally, there was not much difference

TABLE 1

Mean levels of education for birth cohorts 1961, 1965 and 1969. for men and women separately. N's in brackets.

	Table 1a: Highest level completed		Table 1b: Highest level, including attending, but not yet completed	
	Men	Women	Men	Women
Cohort 1961	2.26 (202)	2.20 (205)	2.31 (202)	2.23 (205)
Cohort 1965	2.26 (185)	2.21 (201)	2.43 (185)	2.34 (201)
Cohort 1969	2.16 (197)	2.24 (212)	2.81 (197)	2.67 (212)

between men and women. This impression was confirmed by a two-way gender x cohort ANOVA; neither the main effects nor the interaction were significant at any reasonable level. This suggests that the younger cohorts reached the same level of education as the older cohorts, but in a considerably shorter time (see above). This idea is confirmed by Table 1b; this table shows that there was a trend towards a higher education for each successive birth cohort, while for every birth cohort the males were slightly higher educated than the females. This gender difference was not very impressive, however. Two-way ANOVA revealed only a significant main effect of Birth Cohort ($F_{2,1199} = 14.12$; $p < .01$). A Scheffé range test indicated that the mean level of education of the youngest birth cohort was significantly higher than that of the other two cohorts. Of course, it is possible that focusing on not yet completed courses yields biased results (it will certainly not be the case that all subjects attending university courses will eventually obtain their MA).

All in all, the least the current results show is that the level of education did *not* decrease during the eighties. And indeed, it quite likely that the youngest birth cohort will eventually be better educated than the oldest birth cohort. Thus, we found no support for our expectation that level of education would increase with recession.

Changes in the vocational career of young adults during the eighties

Duration of unemployment

Using survival analysis, we examined whether the duration of the period between leaving full-time education and the entry in the first job varied over birth cohorts. The results indicated that there was no significant gender effect, but, consistent with our hypotheses, the members of birth cohort 1961 experienced considerably more difficulties finding a job than the members of the other two cohorts (Lee-Desu statistic with 2 *df* was 10.45; $p = .005$). Neither the Birth Cohort \times Gender interaction effect nor the Level of Education \times Cohort interaction was significant, and the same applies to the main effect of Level of Education (Lee-Desu test statistic was 4.79 with 4 *df*; $p = .31$). Figure 2 presents the survival curves of the duration of unemployment for each of the three cohorts, for the first three years after leaving full time education.

Figure 2 shows clearly that there was quite some difference between the survival curves of the birth cohorts. For the first ten months, the survival curves of the youngest two cohorts show a rather much steeper decrease than the curve of cohort 1961. Ten months after leaving full-time education, 17 percent of cohort 1961 had still no job, as opposed to 12 percent of cohort 1969. The MST's of the cohorts are 4.17, 3.43 and 3.31 months for birth cohorts 1961, 1965 and 1969, respectively. Hence, there was not much difference between the cohorts with regard to the moment at which half of its members had found a job. However, after the first ten months, the differences between the survival curves became more marked. While the curves of the two youngest birth cohorts continued to decrease, the decrease of the curve for birth cohort 1961 came to a sudden stop. 36 Months after leaving full-time education, virtually all members of the youngest birth cohort had found a job, while 11 percent of the oldest cohort was still unemployed.

These results show that finding a job was much more difficult for the oldest cohort than for the two younger cohorts. The most important difference between these cohorts is that a considerable part of the oldest cohort is still unemployed after three years, while almost all members of the other cohorts have found a job after two to three years. More importantly, the chances to find a job after one year of unemployment were almost zero for the members of birth cohort 1961. Additional analyses revealed that this applied to all members of this cohort, irrespective of their

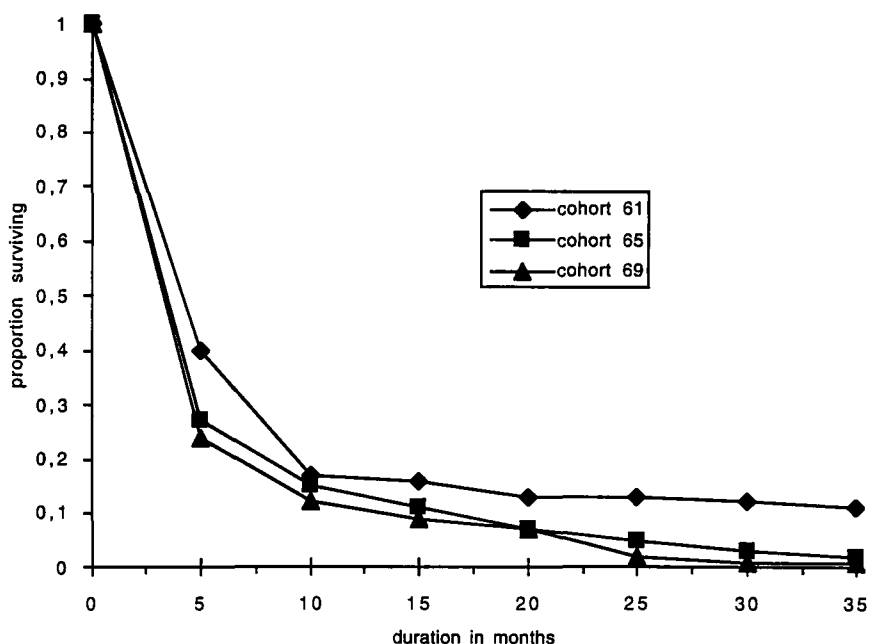


Figure 2. Survival times for leaving unemployment for birth cohort 1961, 1965 and 1969.

level of education. In H.A. Becker's terminology, it seems that the members of birth cohort 1961 were much more "lost" than members of the other cohorts.

Number of hours worked

What were the characteristics of the first job found after leaving full-time education? First we focused on the number of hours worked. A three-way Cohort \times Gender \times Level of Education analysis of variance, with the age at which the job was obtained as a covariate, was performed with the number of hours worked in the first job after leaving full-time education as the dependent variable. The results are presented in Table 2. These indicate that men worked more hours than women ($F_{1,1066} = 18.56$; $p < .001$); those with a higher education worked less hours than those with a low education ($F_{4,1066} = 23.14$; $p < .001$); and members of later cohorts tended to work less hours than the members of the earlier cohorts ($F_{2,1066} = 29.59$; $p < .001$). These effects are net of the effects of the timing of entering the labour market; those who entered at a younger age work more hours than people with relatively little

TABLE 2

Number of hours worked in the first job after leaving full-time education, by level of education, cohort and gender. First row: Number of hours worked, second row: N for this cell (in brackets).

		cohort 1961		cohort 1965		cohort 1969	
		women	men	women	men	women	men
level of education	1	38.4 (78)	40.0 (70)	32.3 (71)	37.2 (50)	32.3 (36)	33.8 (50)
	2	36.6 (63)	39.6 (64)	35.3 (63)	40.4 (81)	29.7 (91)	35.3 (48)
	3	33.9 (18)	42.8 (23)	32.9 (20)	34.5 (17)	28.3 (40)	23.1 (37)
	4	32.2 (34)	39.4 (33)	27.6 (27)	31.4 (23)	30.6 (10)	24.2 (6)
	5	25.6 (11)	28.0 (11)	26.6 (10)	28.3 (10)	32.0 (1)	- (0)

experience ($F_{1,1066} = 13.23$; $p < .001$). Additionally, the Level of Education \times Cohort interaction effect also reaches significance ($F_{8,1066} = 2.58$; $p = .01$), indicating that the trend that people of younger cohorts work less hours than members of older cohorts was especially valid for the lower levels of education.

Level of the first job after leaving formal education

Table 3 presents the mean level of the job as a function of cohort, gender and education. A three-way Cohort \times Gender \times Level of Education ANOVA, with Age at which the job was obtained as a covariate, revealed only main effects. Generally, women had a slightly better job than men ($F_{1,1015} = 9.46$; $p < .001$), while the first job of the older cohorts was usually of a higher level than of the younger cohorts ($F_{2,1015} = 7.32$; $p < .001$). The level of the job of those with a low education was lower than of those having a high level of education ($F_{4,1015} = 10.83$; $p < .001$). Finally, subjects who started working at a young age held a job of lower level than of those who started working at a high age, independently of their level of education ($F_{1,1015}$ is a massive 220.59; $p < .001$). None of the other effects were significant.

TABLE 3

Level of the first job obtained after leaving full-time education by level of education cohort and gender. First row: level of the job second: N of this cell (in brackets).

		cohort 1961		cohort 1965		cohort 1969	
		women	men	women	men	women	men
level of education	1	2.37 (76)	2.12 (66)	2.14 (72)	1.85 (46)	2.00 (36)	1.84 (49)
	2	2.48 (63)	2.19 (59)	2.17 (63)	2.24 (70)	2.23 (92)	2.00 (44)
	3	2.39 (18)	2.11 (18)	2.50 (20)	2.27 (15)	2.21 (38)	1.88 (34)
	4	3.15 (34)	3.31 (29)	2.85 (26)	2.85 (20)	2.70 (10)	2.80 (5)
	5	3.91 (11)	3.40 (10)	3.40 (10)	3.20 (10)	3.00 (1)	- (0)

These results indicate that the level of the first job after leaving full-time education of members of later cohorts was significantly lower than of the oldest cohort. Stated differently, it seems that the younger cohorts started their vocational career in an increasingly simpler job, irrespective of their level of education. The level of the job of a starter of cohort 1961 was on average about .2 (on a six-point scale) better than the job of a member of cohort 1969. Additionally, it should be noted that the difference increases with level of education, i.e., those having a higher level of education now had in 1969 to start at a much lower level than members with the same level of education in 1961. It is likely that the Level of Education x Cohort interaction effect is not significant, due to smaller sample sizes for the higher levels of education.

Appointment type

Finally, we examined whether the nature of the appointment was different for the first job of the birth cohorts. Hierarchical log-linear (logit) analysis was used to analyse the four-way Cohort x Gender x Level of Education x Appointment Type contingency

table, with Appointment Type as the dependent variable. The sparsest model that fitted the data acceptably well was a model that contained two two-way interactions involving Appointment Type (with Level of Education, and Cohort, respectively; L^2 with 23 $df = 34.86$; $p = .05$). Table 4 presents the parameter estimates of this model.

The results showed that lower educated were more likely to have a permanent appointment in their first job after leaving full-time education, while subjects with a high education were more likely to start their employment career holding a temporary position. Contrary to our expectations, the first job of cohort 1961 was likely to be a permanent one, while the first jobs of members of the two younger cohorts were often only temporary.

TABLE 4

Results of a logit analysis of the four-way Appointment Type x Level of Education x Gender x Cohort contingency table (Appointment Type dependent). $N = 887$.
Only nonredundant effects given.

Appointment Type by Level of Education^a

Permanent x Level 1	.37***
Permanent x Level 2	.33***
Permanent x Level 3	.11
Permanent x Level 4	-.25**

Appointment Type by Cohort

Permanent x Cohort 1961	.32***
Permanent x Cohort 1965	-.11*

* $p < .05$, ** $p < .01$, *** $p < .001$.

^aEducation: Level 1: lower secondary education, possibly some vocational training
 Level 2: intermediate secondary education, possibly some vocational training
 Level 3: higher secondary education
 Level 4: professional college qualification
 Level 5: university degree

CONCLUDING REMARKS

The current paper dealt with two main hypotheses. The first was that subjects in times of economic crisis would tend to postpone finishing their education. This was expected to lead to a higher mean level of education. The second was that in times of recession, subjects would experience more difficulties finding a job, and that the quality of jobs offered in such a period (in terms of number of hours, level, and appointment type) would be lower than in times of economic prosperity. Given the historical circumstances in the eighties (recession at the start, better economic circumstances in the middle and end), it was expected that members of birth cohort 1961 would show the patterns as expected in times of recession, while members of birth cohort 1969 would be relatively well off.

The present study does not unequivocally confirm the hypotheses regarding the impact of the recession on the development of the educational career of subjects, to use an understatement. Contrary to our expectations, the members of the oldest birth cohort needed less time to complete their education, and their average level of education was not higher than that of younger cohorts—rather the reverse. Hence, we must conclude that the present analyses do not yield convincing evidence for the hypothesis that subjects will postpone leaving education in times of recession, nor that people will try to obtain a higher level of education in such times. Rather, it appears that each successive cohort becomes better educated (this is consistent with the “extrapolation” view on the rising level of education across time; see Note 3).

Concerning the effects of the recession on the vocational career of subjects, our results fit the hypotheses only marginally better. Members of cohort 1961 had indeed a much harder time finding a job than members of younger cohorts. However, the quality of this job (in terms of the number of hours worked in this job, level of the job, and appointment type) was better for members of cohort 1961 than for the members of the younger cohorts. Thus, it seems that the data are not consistent with the notions outlined in the introduction to this paper.

Anticipating the past

Which processes, then, might account for the data patterns observed in this study? It is a well-known psychological

phenomenon that subjects, in predicting the future, tend to react to past situations. It could well be the case that members of the younger cohorts examined here take the decision to invest in their education, because they know that the preceding cohorts have experienced many difficulties finding a suitable job (many a member of the younger cohorts will have been confronted with unemployment at the beginning of the eighties; older sisters and brothers will have had problems finding a job, while fathers and mothers may have been fired). They, therefore, anticipate to be confronted with a similar situation, and invest in their education—even though the labour market would have offered relatively good opportunities would they have left secondary education at an earlier age. There is some evidence that this is the case with regard to choice of vocational specialisation (Borghans, De Grip and Heijke, 1990). Such a line of reasoning could explain why the mean level of education of the younger cohorts at least equals the level of education of the oldest cohort.

Employment and education: The decreasing pay-off of education

It appears that members of cohort 1961 did not really react to the relatively bad labour market circumstances at the beginning of the eighties, at least not in the way one would expect on the basis of the human capital theory. Thus, they did not invest much more in their education to enlarge their labour market opportunities. The moment they left school, they faced a hard time finding a job. But if they found a job, its quality (number of hours, appointment type, and level) was reasonably good: many respondents' first job after leaving full-time education was a full-time, permanent appointment, and the level of this job usually more or less matched one's level of education. However, there will have been only little opportunity to improve one's position (the members of the preceding generation (born between 1940 and 1955) were still far from their retirement).

The number of vacancies grew during the eighties, but these new positions were often of a relatively low quality (indeed, the number of full-time positions declined, while the number of "junk jobs" and jobs with a "flexible" contract increased strongly, CBS, 1989, 1994). Therefore, subjects entering the labour market in the middle and late eighties (many of which belonged to the two youngest cohorts used in this study), were forced to accept jobs that were below their level of education. Additionally, they had

little opportunity to improve their position, as they had to compete for these better positions with the more-experienced members of the earlier cohorts.

Under these circumstances, it cannot be expected that the larger investment in education of the younger cohorts pays off. There were simply not enough high-quality positions available to absorb the large supply of highly educated workers. Hence, many subjects who entered the labour market in the middle and late eighties had to be satisfied with positions that were even more below their level of education, and offered even worse working conditions, than the jobs that were available for members of the earlier cohorts.

All in all, our results tend to disconfirm the hypotheses formulated above on the impact of the recession on the educational and vocational careers of young adults. Though we have shown that there were indeed marked differences between the educational and vocational careers of the members of three birth cohorts, these differences were often a direction that was contrary to our theory-based hypotheses. It seems that subjects behave rather differently from what one would expect on the basis of economic circumstances; more or less rational psychological processes (such as anticipating the past) may be more important in explaining why some subjects/cohorts invest more in their education than others. This, in turn, has consequences for the development of the vocational career across cohorts. As subjects do not seem to base their educational investment on the development of the economy (each successive birth cohort has a slightly higher level of education than the preceding cohorts), there is reason to expect a considerable mismatch of the level of education of the more younger cohorts on the one hand, and the type of jobs offered to them on the other. This situation will probably continue up until the moment that the members of older generations leave the labor market. Until that time, many members of the lost generation must satisfy themselves with a job that is below their level of education.

NOTES

1. Taris' contribution to this report was supported by a grant from the Netherlands Organisation for Scientific Research (NWO), number PGS 56-381.
2. Indeed, Karl Mannheim—the godfather of generations research—already stated that within any generation, there may be a number of differentiated generation units, that can be of an *antagonistic* nature (Mannheim, 1928/

- 1929). Indeed, the struggle within a particular generation between the different birth cohorts that constitute a generation may be what distinguishes this generation from other generations.
3. On the other hand, if it were the rising level of education that allowed for the increasing use of education as an allocation mechanism (a view that is the reverse of that of De Graaf and Luijkx, 1992; what is the true causal direction?), we could formulate an "extrapolation"-hypothesis: younger cohorts will be better educated than older cohorts, independent of the economic circumstances. The basis for such a hypothesis would probably have to be found in modernisation theory, and not in simple economic laws or cohort effects.
 4. One might contend that a governmental limitation of the period during which one can receive a scholarship is probably due to the fact that the governmental possibilities to offer scholarships are also limited by the recession. Hence, this is not so much an alternative explanation, but rather a more precise variation on the same theme (the effects of economic recession). The same applies to the explanation that the cohorts differ with regard to norms and values: this could also be the result of economic circumstances (this process lies at the heart of H.A. Becker's [1993] theory).

REFERENCES

- Bakker, B.F.M., Jonker, J.K. & Oud, J.A. (1988). *Een alternatieve aggregatie van beroepen op basis van de beroepenclassificatie 1984* (An alternative aggregation of jobs on the basis of the job classification 1984). Dutch Bureau of Statistics CBS; Voorburg.
- Becker, G.S. (1975). *Human capital*. National Bureau of Economic Research; New York.
- Becker, H.A. (1990). Social consequences of demographic change. In (C.A. Hazeu and G.A.B. Frinking, eds.) *Emerging issues in demographic change*. Elsevier; Amsterdam.
- Becker, H.A. (1993). A pattern of generations and its consequences. In (H.A. Becker, ed.) *Dynamics of cohort and generations research*. Thesis Publishers; Amsterdam.
- Borghans, L., De Grip, A. & Heijke, H. (1990). *Labour market information and the choice of vocational specialisation*. ROA, working paper ROA-W1990/2E; Maastricht.
- CBS (1989). *Enquete beroepsbevolking 1988* (Labor market survey 1988). CBS; Voorburg (The Netherlands).
- CBS (1995). *Enquete beroepsbevolking 1994* (Labor market survey 1994). CBS; Voorburg (The Netherlands).
- De Graaf, P.M. & Luijkx, R. (1992). Van "ascription" to "achievement"? Trends in statusverwerving in Nederland tussen 1930 en 1980 (From ascription to achievement: Trends in status attainment in the Netherlands between 1930 and 1980). *Mens & Maatschappij*, 67, 412-433.
- Dijkstra, W. & Smit, J.H. (1989). Nonrespons (Nonresponse). In (W. Dijkstra, ed.) *Het proces van sociaie integratie van jong-volwassenen: De eerste hoofdmeting* pp. 59-70. Free University Press; Amsterdam.
- Goyder, J. (1987). *The silent minority*. Blackwell; Cambridge.
- Graafland, J.J. (1992). From Phillips curve to wage curve. *The Economist*, 140, 501-514.

- Huijgen, F. (1989). *De kwalitatieve structuur van de werkgelegenheid in Nederland. Bevolking in loondienst en functieniveaustuur in 1977 en 1985* (The qualitative structure of employment in the Netherlands between 1977 and 1985). OSA; The Hague.
- Lee, E. & Desu, M. (1972). A computer program for comparing k samples with right-censored data. *Computer Programs in Biomedicine*, 2, 315-321.
- Mannheim, K. (1928/1929). Das Problem der Generationen. *Kölner Vierteljahreshefte für Soziologie*, 7, 157-189 and 309-330.
- OECD (1992). *From higher education to employment* (vol. I-VI). OECD; Paris.
- Phelps, E.S. (1968). Money-wage dynamics and labor-market equilibrium. *Journal of Political Economy*, 76, 678-711.
- Phillips, A.W. (1958). The relation between unemployment and the change of money wage rates in the United Kingdom, 1862-1957. *Economica*, 25, 283-299.
- Schaufeli, W.B. (1988). *Unemployment and psychological health: An investigation among Dutch professionals*. Groningen State University; Groningen.
- Taris, T.W. & Bok, I.A. (1996). Parenting environment and scholastic achievement: A retrospective study. *Early Child Development and Care*, 121, 67-83.
- Taris, T.W., Heesink, J.A.M. & Feij, J.A. (1995). The effects of the evaluation of unemployment on job-searching behaviour and finding a job: A longitudinal study. *The Journal of Psychology*, 129, 301-314.
- Van Ewijk, H. (1994). *De verschuiving: De veranderde status van jongeren in de jaren tachtig* (The shift: The changing prestige of youth during the eighties). De Tijdstroom; Utrecht.